

CLAIMS

1. An optical unit of a collapsible type including
a fixed barrel,
at least one lens barrel movable along a direction of the optical axis with respect to said fixed barrel, and
a lens and an optical filter provided between said fixed barrel and said lens barrel, comprising:
an escape mechanism for making said optical filter move in a direction intersecting an optical axis to escape off the optical axis, when said lens barrel is collapsed to approach said optical filter, wherein said lens is retractable in a resultant position on the optical axis after said optical filter is moved.
2. An optical unit according to claim 1, wherein
said escape mechanism comprises a casing that is provided in said fixed barrel and that holds said optical filter movably, and a move mechanism for making said optical filter move between said position on the optical axis and a position off the optical axis.
3. An optical unit according to claim 2, wherein
said move mechanism comprises a filter holder to hold said optical filter, a power source generating power to move said

filter holder within said casing, and a power transmission mechanism to transmit power from said power source to said filter holder to be linearly moved.

4. An optical unit according to claim 1, wherein
said optical filter is an infrared cutoff filter and/or a low-pass filter.

5. An optical unit of a collapsible type including
a fixed barrel,
at least one lens barrel movable along a direction of the optical axis with respect to said fixed barrel, and
a lens and an optical filter provided between said fixed barrel and said lens barrel, comprising:

an escape mechanism for making said optical filter move in a direction intersecting an optical axis to escape off the optical axis, when said lens barrel is collapsed to approach said optical filter, and

a forcible escape mechanism for making said optical filter escape off the optical axis forcibly, when said escape mechanism cannot make the optical filter escape off the optical axis.

6. An optical unit according to claim 5, wherein
said forcible escape mechanism comprises a projection

provided in said lens barrel on the side of said optical filter, and a pressure-receiving portion provided in a member on the side of said optical filter and depressed by said projection abutting thereon, which makes the optical filter move from a position on the optical axis to a position off the optical axis.

7. An optical unit according to claim 5, wherein

said forcible escape mechanism has a projection in said lens barrel on the side of said optical filter and actuates said escape mechanism by said projection to make said optical filter escape off the optical axis forcibly.

8. An optical unit according to claim 5, wherein

said escape mechanism comprises a casing that is provided in said fixed barrel and that holds said optical filter movably, and a move mechanism for making the optical filter move between said position on the optical axis and a position off the optical axis.

9. An optical unit according to claim 8, wherein

said move mechanism comprises a filter holder for holding said optical filter, a power source generating power to move said filter holder within said casing, and a power transmission mechanism to transmit the power from said power source to said

filter holder to be linearly moved.

10. An optical unit according to claim 5, wherein
said optical filter is an infrared cutoff filter and/or a
low-pass filter.

11. An image-pickup apparatus comprising an optical unit
which includes

a fixed barrel,
at least one lens barrel movable along the optical axis
with respect to said fixed barrel,

a lens and an optical filter provided between said fixed
barrel and said lens barrel, and

an escape mechanism for making said optical filter move in
a direction intersecting an optical axis to escape off the
optical axis, when said lens barrel is collapsed to approach
said optical filter, wherein

said lens can be retracted in a resultant position on the
optical axis after said optical filter is moved.

12. An image-pickup apparatus comprising a collapsible
optical unit which includes

a fixed barrel,
at least one lens barrel movable along a direction of the

optical axis with respect to said fixed barrel,

a lens and an optical filter provided between said fixed barrel and said lens barrel,

an escape mechanism for making said optical filter move in a direction intersecting an optical axis to escape off the optical axis, when said lens barrel is collapsed to approach said optical filter, and

a forcible escape mechanism for making said optical filter escape from a position on the optical axis forcibly, when said escape mechanism cannot make said optical filter escape from the position on the optical axis.